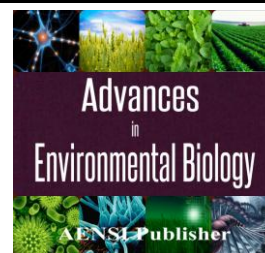




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## A Field Study Aiming to Determine Entrepreneurial Profiles of University Students (Examples of Dumlupınar University – İnönü University)

<sup>1</sup>Mehmet Acet, <sup>2</sup>A. Serdar Yücel, <sup>3</sup>Arslan Kalkavan, <sup>4</sup>Nurkan Yılmaz

<sup>1-3</sup>Dumlupınar University School of Physical Education and Sports, Kütahya, Turkey

<sup>2</sup>Fırat University School of Physical Education and Sports, Elazığ, Turkey

<sup>4</sup>Dumlupınar University Institute of Medical Sciences

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### ABSTRACT

Element of entrepreneurship had an important role in ensuring the social welfare and in regional development in the 21st century. In this sense, universities undertaking the mission of educating future's entrepreneurs bear tremendous responsibility. It is obligatory to determine the university students' tendency of entrepreneurship, and to guide correctly those having entrepreneurship characteristics and bring them in to the business life. In this study, it is aimed to determine entrepreneurship profiles of students receiving education in different faculties/ departments; and to compare certain demographical characteristics of students educated in School of Physical Education and Sports (S.P.E.S.) with the characteristics of students participated in the research and receiving education in other faculties. Also the effects of total time of doing sports and status and period of registered sporting on the entrepreneurship profiles of participants were examined. Research was made practically on 479 students receiving education in "Faculties of Education, Economic and Administrative Sciences, and School of Physical Education and Sports" who were elected by means of random sampling method. 247 female and 232 male students participated in the research. At the end of the study, it is determined that infrastructure of entrepreneurship of the university students is at a satisfactory level, and that entrepreneurship level did not differ according to the variables of gender and age. It is found that students with a monthly income ≤ 500 TL have a lower entrepreneurship level in comparison to the other income groups, and students who are doing sports and have a social-extravert and active psychological structure have a higher entrepreneurship level. Also, it is established that students of school of physical education and sports have the highest entrepreneurship level according to the variable of faculty and department.

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## INTRODUCTION

One of the important variables Entrepreneurs are persons functioning as the power-plant for the growth and development of a country. Concept of entrepreneurship is defined in different ways according to the type of profession. For example, on one hand, economists describe entrepreneur as a person who makes production by utilizing the sources gathering the production factors together efficiently, and thus making money in this way; on the other hand entrepreneur is defined as an overbold investor, ambitious and passionate competitor, a customer or an ally in terms of an industrialist entrepreneur. For a tradesman, an entrepreneur makes investments, takes risks, and earns money by competing, on the other hand highly motivated persons who want to obtain something, to reach something, to try something, and to share the authority other people have are entrepreneurs for the psychologists [16, 40].

It is known that entrepreneurs; who ate the basic drivers for the growth and development of a country and who can start a business from scratch or make new expansions in order to provide goods and services for the society by undertaking profit and loss risks [18]; have characteristics such as being their own boss, creativity, having internally controlled personality, vision holder personality, being self-confident, optimistic, stoical persons, to be able to work in an atmosphere of uncertainty, having a willing to succeed [25, 38]. Scientists define the concept of entrepreneurship in different ways;

**Corresponding Author:** A. Serdar Yücel, Fırat University, School of Physical Education and Sports Box.23119. Elazığ. Turkey.  
Tel: +904242370000-5730 E-mail: [alsetu\\_23@hotmail.com](mailto:alsetu_23@hotmail.com)

Bird. (1989) define entrepreneurship as a “process of establishing a new profit-oriented installation or expanding the existing one, and creating goods or services in order to create value”; on the other hand [26]. describe it as “activity of perceiving an opportunity and establishing an organization to seize that opportunity”; Lounsbury. (1998) as “the activity of examining alternative production processes to seize an opportunity and provide their optimization; Muzyka, Koning and Churchill. (1995) as “the process that creates value for the individual and the society, replies the economical opportunities or creates economical opportunities, and that is established by individuals, and causes changes in the economic system by means of novelties introduced”.

Entrepreneurship is to create value by introducing innovations, utilizing creative skills or by other ways and by finding new products, services, sources, technologies and markets [7]. When these characteristics are considered altogether, it is seen that factors such as innovation and change, flexibility, dynamism, risk-taking, creativity and being development-oriented have importance in almost all definitions of entrepreneurship [22, 40]. In a series of studies realized on entrepreneurship, it is always emphasized that successful entrepreneurs may have certain joint characteristics. In fact, we encounter entrepreneurs who achieve big success in business life in a short period of time in comparison to the others. However, it is seen that successful entrepreneurs have very different characteristics in terms of both their activity fields and the works they perform. However some characteristics may be listed as being common in entrepreneurs who are found successful: risk-taking, bearing liabilities, dynamic personality, personality open to change, innovation and conversion, passion for being ambitious and leader, and finally focusing on success. It is not possible for those who do not have these characteristics to be successful as an entrepreneur [30, 40].

Today, universities try to accommodate themselves to global-information age under the pressure of multi-variant, complex and intense transformation and conversion. It is known that transformations, conversions also named as the concept of “entrepreneur university” are performed in most of the western world. Within this context, it is obvious that universities need a renewal period and a period to realize the necessary structural changes. Reasons necessitating this transformation in universities may be listed as follows: the requirement of higher education to come up to international standards as a global reason, and national factors such as expectations of people from all strata to receive a better education, resource shortage and increasing population, necessity of universities to play a more active role in the regional development, efficiency and industrialization, etc. On the other hand, it is possible to list institutional reasons as requirements of academic staff to work and give education under better conditions; increasing pressure applied to universities by certain environments, etc. Pressures resulting from these issues make itself apparent in an increasing intensity on the higher education system. All managers and constituents of all universities, particularly state universities, try to find the solutions to think strategically about the future of universities in connection with the vision of future beyond their daily activities and to realize the required conversion [29].

As a consequence of the current university education, it is seen that number of jobless graduates is increasing. Education is wide of the mark to train the individuals required by the business world, and also it does not give the opportunity of developing the entrepreneur personality structure. Education system has acquired a structure that raises stressed and ill individuals instead of self assured and entrepreneurship-oriented individuals. Exams such as ÖSS, KPSS, etc, have left behind many juveniles with panic attack disease. Students having boilerplate opinions and civil servant mentality are raised in universities, and these individuals are encouraged for government office and for government salaries. Instead of formulas, students should have his/her own model and perspective in order to accommodate himself/herself to changing world order and to attain a new viewpoint. In this way, solid hierarchic structures may be destroyed and entrepreneurship-centered liberal structures may be constructed. On the contrary, pressures and prejudices force potential spirit of entrepreneurship in the subconscious and send it to the lumber warehouse [5, 8].

Basic purpose entrepreneur training is to enable individuals to establish their own business and work independently. Aim of the entrepreneurship training programs is to give the basic entrepreneurship and business administration information necessary for the individuals to establish their own businesses and to facilitate their transfer to the private sector and to enable them to carry on these businesses successfully [36]. Rapid improvements in science and technology have altered the structure of societies, and also increased the economic value of entrepreneur and entrepreneurship and their significance in the society. As a consequence, entrepreneurship based on individuals and personal abilities came into prominence and intellectual productivity of the individual gained importance. In the developed countries, juveniles that received higher education are considered as entrepreneurs ready for training, and it is emphasized that educated juveniles have various advantages in terms of entrepreneurship [4]. Spirit of entrepreneurship should be revealed and supported in order to achieve contemporary civilization in our country [1].

All countries are attended to support the initiatives and to develop entrepreneur culture for the new entrepreneurs. In the same way, various educations systems in the world try to find solutions to support entrepreneurs by discovering new approaches [21]. In this context, it is of vital importance to consider each student entering university as an entrepreneur candidate and to equip them with knowledge and abilities that

shall enable them to become aware of their potentials and the environment they live in and to turn problems into opportunities; and train them as individuals whose creativeness is incited instead of being depressed [4].

Our age is the age of speed, change and productiveness. In the 21st century, the most important competition between the companies and the public enterprises shall be the optimal utilization of resources in hand, and competition shall be observed among those that are vision holders and can devise different projects [33]. Universities and educational institutions that want to determine their mission and vision in accordance with the contemporary civilization level, can not become distanced to these changes and improvements. For this reason, determining the potential entrepreneurs and their entrepreneurship tendencies, and obtaining their entrepreneurship profiles shall be acquisitions for the sake of future [32].

Development and diffusion of entrepreneurship are closely linked to the existence of infrastructure factors necessary for the entrepreneurship in the region. The most important one among these factors is the “entrepreneurship culture”. Entrepreneurship culture has an important role in the development and diffusion of entrepreneurship. Entrepreneurship culture adds vision and mission to the entrepreneurs, and enables raising of entrepreneur that aims to get the worth of his/her works and expenditures. Seeing the opportunities and turning these into a business idea, being able to take risks and providing employment by establishing enterprises are among the most important characteristics of an entrepreneur trained according to the entrepreneurship culture [36].

The aim of this study is to determine entrepreneurship tendencies of university students as potential entrepreneur candidates, and the factors influencing these tendencies and examine whether or not these factors differ among the faculties.

## MATERIALS AND METHODS

### *Purpose and Scope of the Research:*

In the research, it is aimed to determine entrepreneurship profiles of students receiving education in different faculties/departments and to compare entrepreneurship profiles of students of School of Physical Education and Sports (S.P.E.S.) with the students of other faculties included in the research in terms of certain demographic features. Also effects of total sporting time and registered sporting status and time of participants on their entrepreneurship profiles are investigated. Students receiving education in Faculty of Education, Faculties of Economics and Administrative Sciences and School of Physical Education and Sports, Kütahya Dumlupınar University – Malatya İnönü University in the fall and spring seasons of 2009-2010 school year constitute the population of the research. Sample group is composed of 479 students identified by simple, random sampling model and receiving education in Faculties of Education, Economics and Administrative Sciences, and School of Physical Education and Sports. For filling out the questionnaires, students were randomly selected at break times among those who are in the classes and outside of the classes. The reason of selecting only students of F.E.A.S., Faculty of Education and S.P.E.S. as the research population, is the thought that F.E.A.S., Department of Business has the mission of training the entrepreneur candidates of future, and students of this department have the intention of being an entrepreneur and their entrepreneurship potential shall be improved by the education they will receive; and that students of Faculty of Education and S.P.E.S. constitute the section that do not plan to be an entrepreneur, and want to work as a wage owner in the field they received education.

Entrepreneurship scale, developed by Yılmaz and Sünbül (2009) and consisting of 36 articles, is utilized to determine the entrepreneurship profiles of students. This scale is likert type and a 5 interval scale starting from “Very frequent” (5) and extending to “Never” (1). As a result of reliability analyses of the scale, Cronbach Alpha reliability coefficient of the scale is found to be 0.90. Entrepreneurship scores are specified as 36-64 points “very low entrepreneurship”, 65-92 points “low entrepreneurship”, 93-123 points “medium level entrepreneurship”, 124-151 points “high entrepreneurship” and 152-180 points “very high entrepreneurship” (Yılmaz & Sünbül, 2009).

Data obtained are processed in electronic medium by utilizing SPSS 15.0 statistical program. Frequency analysis to determine demographical features of those filling out the questionnaires; whether or not data have normal distribution in the determination of difference of participants’ opinions on their entrepreneurship profiles of the according to certain independent variables (age, gender, family income level, registered sporting, class, department, faculty, etc.) and according to the homogeneity test results of variances; “independent sample t test” or “Mann Whitney U test” in the paired comparison of variables, “Anova” or “Kruskall-Wallis” for the differences among groups, “Dunnett’s C” test when variances are not homogeneous and “Bonferroni” test when variances are homogeneous for the determination of inter-group differences are utilized. Interpretation is supported by the tables.

*Restrictions of the Research:*

Research is restricted to the students of Kütahya Dumlupınar University-Malatya İnönü University. Entrepreneurship profiles of students of other universities are not taken into consideration.

*Results:**Frequency Distribution of Data Obtained:*

42.6% of participant students (204) are 20 years old and under, 52.4% (251) is between ages 21 and 25, and 5% (24) is 26 years old and above. 51.6% of the students (247) are female and 48.4% (232) is male students. 26.5% (127) is students of Faculty of Education, 39.2% (188) is from Faculty of Economics and Administrative Sciences and 34.2% (164) is from School of Physical Education and Sports. 34.2% of the students (164) are receiving education in the departments of school of physical sciences and sports (professional teaching, administration, coaching and recreation), 26.3% (126) is students in primary school, preschool, social sciences, science and Turkish teaching departments, and 39.5% (189) is students of departments of history, business and economics.

50.5% of students (242) are in the 1st class, 33.4% of them (160) in the 2nd class, 5.8% (28) is in the 3rd class, and 10.2% is the students of 4th class. It is determined that 12.7% (61) of the students have a monthly family income under 500 TL, 36.7% (176) between 501 and 1000 TL, 30.3% (145) between 1501-2000 TL, and 7.5% (36) above 2000 TL.

It is established that 27.3% (131) of the students have a sporting history of 2-4 years, 16.7% (80) between 5 and 7 years, 12.9% (62) between 8 and 10 years, 6.3% (30) between 11 and 13 years, 6.9% (33) 14 years and above. 29.9% (143) has stated that they did not do any sporting. Distribution rate of registered sporter students is 34.4% (165). It is revealed that 12.9% (62) of registered sporter students are doing sports between 1-2 years, 11.9% (57) between 3 and 5 years, 5.6% (27) between 6 and 9 years, 4% (19) between 10 and 13 years. Also it is specified that 25.9% (124) of students have defined themselves as quiet-calm, 46.3% (222) social and extroversive, 17.1% (82) energetic (hyperactive) and 10.6% (51) nervous and hot-blooded.

**Table1:** General entrepreneurship levels of the participants

ENTREPRENEURSHIP	N	A. Average	S.Deviation
	479	137,38	18,012

Distribution of entrepreneurship points of the students is given in Table 1. All of the participant 479 university students are students of Dumlupınar University and İnönü University in the fall-spring terms of 2009-2010 school year. Point average of participants determined by entrepreneurship scale is 137.38. Since this value is between 124-151 points, entrepreneurship point averages of students are in the interval of high entrepreneurship. Also general average of replies given to all question on Entrepreneurship is established as 3.81.

**Table 2:** General entrepreneurship levels of participants.

	N	A. Average	S. Deviation
School of Physical Sciences and Sports	164	141,71	18,43
Faculty of Education	127	132,79	16,80
Faculty of Economics and Administrative Sciences	188	136,69	17,64

Entrepreneurship point distribution is given in Table 2 according to the schools/ faculties from which students are receiving education. Entrepreneurship point average of all groups is in the interval of 124-151 points. The highest entrepreneurship point average belongs to the students of School of Physical Education and Sports and it is 141.71.

**Table 3:** T-test results for the "Gender" variable difference and entrepreneurship points of the participants.

Dependent Variables	Groups	N	%	$\bar{X}$	SS	Sd	Levene		t	P
							F	P		
Entrepreneurship scale points	Female	247	51.6	136,77	18,01	477	,001	,977	-,771	,441
	Male	232	48.4	138,04	18,02					

No significant difference is identified between the entrepreneurship points of the participants and the "gender" variable.

**Table 4:** T-test results for the "Registered Sporting" variable difference and entrepreneurship points of the participants.

Dependent Variables	Groups	N	%	$\bar{X}$	SS	Sd	Levene		t	P
							F	P		
Entrepreneurship scale points	Yes	165	34.4	142,77	19,09	477	3,348	,068	4,856	,000*
	No	314	65.6	134,55	16,76					

A significant different is found between the entrepreneurship points of the participants and the variable of “Registered Sporting” in favor of those doing registered sporting ( $t=4,856$ ,  $p<.05$ ). It is seen that point average received from the entrepreneurship scale by the participants doing registered sports is higher (Table 4).

**Table 5:** KWH test results establishing “Age” variable differentiation status and entrepreneurship points of the participants.

Dependent Variables	Groups	$\bar{X}$	N	%	Sequence Average	Sd	KWH	P
Entrepreneurship scale points	$\leq 20$	137,12	204	42.6	242,73	2	,572	,751
	21-25	137,34	251	52.4	236,28			
	$\geq 26$	140,08	24	5.0	255,77			

It is determined that data is not homogenous after the Levene homogeneity test. For this reason, Kruskal Wallis K (KWH) test for unrelated k-sample, which is recommended as an alternative test when “normality” conjecture is not met for the parametric statistics Büyüköztürk. (2006) is utilized. As a consequence of the test, no significant difference is determined between the entrepreneurship points of participants and “age” variable.

**Table 6:** One way variance analysis (Anova) results for the difference of entrepreneurship points of participants and the variable of “Faculty”

Dependent Variables	Groups	N	%	$\bar{X}$	SS	VK	KT	Sd	KO	F	P	Difference
Entrepreneurship scale points	Faculty of Education	127	26.5	132,69	16,77	Inter-group	5935,731	2	2967,86	9,472	,000*	1-3 2-3
	Faculty of Economics and Administrative Sciences	188	39.2	136,78	17,65							
	School of Physical Education and Sports	164	34.2	141,71	18,43	Intra-group	149144,0	476	313,328			
	Total	479	100.0	137,38	18,01							

A meaningful difference is determined between the entrepreneurship points of participants and variable of “Faculty” in favor of school of physical education and sports ( $F=9,472$ ,  $p<.05$ ). It is seen that point average students of school of physical education and sports received from entrepreneurship scale is higher than the other faculties (Table 6).

**Table 7:** One way variance analysis (Anova) results for the difference of entrepreneurship points of participants and the variable of “Department”

Dependent Variables	Groups	N	%	$\bar{X}$	SS	VK	KT	Sd	KO	F	P	Difference
Entrepreneurship scale points	Teaching, administration, coaching, recreation	164	34.2	141,71	18,43	Inter-group	5817,800	2	2908,90	9,277	,000*	1-2 1-3
	Primary school, preschool, social sciences, science, Turkish teaching	126	26.3	132,79	16,80							
	History, business, economics	189	39.5	136,69	17,64	Intra-group	149262,0	476	313,576			
	Total	479	100.0	137,38	18.01	Total	155079.8	478				

A meaningful difference is determined between the entrepreneurship points of participants and variable of “Department” in favor of departments of school of physical ducation and sports ( $F=9,277$ ,  $p<.05$ ). It is seen that point average students of school of physical education and sports received from entrepreneurship scale is higher than the other faculties (Table 7).

**Table 8:** One way variance analysis (Anova) results for the difference of entrepreneurship points of participants and the variable of “Class”.

Dependent Variables	Groups	N	%	$\bar{X}$	SS	VK	KT	Sd	KO	Levene		F	P	Difference
										F	P			
Entrepreneurship scale points	1 <sup>st</sup> class	242	50.5	136,80	18,30	Inter-group	5793,69	3	1931,23	,845	,470	6,145	,000*	1-3
	2 <sup>nd</sup> class	160	33.4	137,08	16,81									2-3
	3 <sup>rd</sup> class	28	5.8	150,75	16,24	Intra-group	149286,1	475	314,286					3-4
	4 <sup>th</sup> class	49	10.2	133,61	18,51									
	Total	479	100.0	137.38	18.01	Total	155079.8	478						

A meaningful difference is specified between the entrepreneurship points of participants and the variable of “class” in favor of 3rd class ( $F=6,145$ ,  $p<.05$ ). It is seen that point average 3rd class students received from entrepreneurship scale is higher than the other faculties (Table 8). Students receiving education in School of Physical Education and Sports constitute the majority of the students of 3rd Class (%92.9).

**Table 9:** One way variance analysis (Anova) results for the difference of entrepreneurship points of participants and the variable of “Family Income Status”

Dependent Variables	Groups	N	%	$\bar{X}$	SS	VK	KT	Sd	KO	Levene		F	P	Difference
										F	P			
Entrepreneurship scale points	≤500	61	12.7	132,11	18,24	Inter-group	3316,93	4	829,234	1,566	,182	2,590	,036*	1-3
	501-1000	176	36.7	136,20	17,85									
	1001-1500	145	30.3	140,34	15,87	Intra-group	151762,8	474	320,175					
	1501-2000	61	12.7	138,49	19,94									
	≥2001	36	7.5	138,33	21,26									
	Total	479	100.0	137,38	18,01	Total	155079,8	478						

A meaningful difference is specified between the entrepreneurship points of participants and the variable of “Family income status” in favor of those who have family income between 1001-1500 TL ( $F=2,590$ ,  $p<.05$ ). It is seen that point average students with an income of ≤500 TL received from entrepreneurship scale is the lowest in comparison to the other income groups (Table 9).

**Table 10:** One way variance analysis (anova) results for the difference of entrepreneurship points of participants and the variable of “sports history”

Dependent Variables	Groups	N	%	$\bar{X}$	SS	VK	KT	Sd	KO	Levene		F	P	Fark
										F	P			
Entrepreneurship scale points	2-4 years	131	27.3	139,70	17,40	Inter-group	11549,99	5	2310,0	,249	,940	7,613	,000*	1-6 2-6 3-6 4-6
	5-7 years	80	16,7	140,21	16,71									
	8-10 years	62	12.9	144,03	17,74	Intra-group	143529,8	473	303,446					
	11-13 years	30	6.3	140,93	18,00									
	≥14 years	33	6.9	136,00	18,37									
	No sporting	143	29.9	130,37	17,33									
	Total	479	100.0	137,38	18,01	Total	155079,8	478						

A meaningful relation is determined between the entrepreneurship points of participants and the variable of “Sporting History” ( $F=7,613$ ,  $p<.05$ ). It is seen that this difference is between groups that have a sporting history at a certain period of time and the group that did not do sports. Point average of the group that did not do sports is the lowest average (Table 10).

**Table 11:** Results of one way variance analysis (Anova) for the difference of “Registered Sporting Time” variable and entrepreneurship points of participants

Dependent Variables	Groups	N	%	$\bar{X}$	SS	VK	KT	Sd	KO	Levene		F	P
										F	P		
Entrepreneurship scale points	1-2 years	62	37.6	140,20	18,42	Inter-group	1242,834	3	414,278	1,603	,191	1,139	,335
	3-5 years	57	34.5	144,28	19,10								
	6-9 years	27	16.4	147,37	17,21	Intra-group	58547,86	161	363,651				
	10-13 years	19	11.5	140,10	23,22								
	Total	165	100.0	142,77	19,09	Total	59790,70	164					

No meaningful difference is specified between the entrepreneurship points of participants and variable of “Registered sporting”.

**Table 12:** KWH test results establishing the status of differentiation of entrepreneurship points of participants and the variable of “Mood”

Dependent Variables	Groups	N	%	Sequence Average	Sd	KWH	P	Fark
Entrepreneurship scale points	Quite-Calm	124	25.9	188,15	3	30,975	,000*	1-2 1-3 3-4
	Social-extroversive	222	46.3	256,75				
	Hyperactive (energetic)	82	17,1	286,19				
	Nervous and hot-blooded	51	10.6	218,91				

A significant difference is determined between the entrepreneurship points of participants and variable of “Daily mood” ( $KWH=30,975$ ,  $p<.05$ ). It is seen that this difference is between quiet-calm group and social-extroversive, hyperactive groups; and hyperactive group and hot-blooded group (Table 12).

### Discussion:

All of the 479 participant university students are from Dumlupınar University and İnönü University in their fall-spring terms of 2009-2010 school year. Point average of the participants received from the entrepreneurship scale is 137.38. Since this point is within the interval of 124-151 points, entrepreneurship point average of the students is in the high entrepreneurship interval. It can be accepted as a positive development that entrepreneurship level of students is high even though there is no course or elective course on entrepreneurship in most of the departments of faculties/schools included to the research, and students did not receive any education on entrepreneurship. Popular wisdom among university students is that capital is the single condition of being an entrepreneur. Capital is an important factor in entrepreneurship, however sometimes intellectual courage capital can be more significant. When we consider that most of the participants (49.4%) have an

income of 1000 TL and under, it may be stated that intellectual courage capitals of participants have contributed to this positive result. Additionally, it is established that point average students of school of physical education and sports received from entrepreneurship scale is higher than the other faculties ( $\bar{X}=141.71$ ). It can be said that troubles graduates of school of physical education and sports experienced in the field of employment and sports becoming a serious entrepreneurship area in Turkey and graduates beginning to find more work area in the private sector have affected this situation. Although high entrepreneurship level of participants is considered as an affirmative development, this result may arise from various factors.

As a result of the statistical analysis of data obtained in the research, no meaningful difference is found in the entrepreneurship levels of female and male university students. When entrepreneurship points of female students are examined, the average is found as 136.77; and average of male students is 138.04 (Table 3). In some of the studies on assertiveness and entrepreneurship as personal characteristics no significant difference is found [17], however in several studies it is established that male students exhibited more assertive and entrepreneurial behaviors [2]. According to Goffe and Scase (1992) differences in social responsibilities with respect to gender continue starting from the start till the end of lives of human beings. Although gender roles change from society to society and in the course of history; changeless dimension is the prevalence of understanding that women have a secondary position on the basis of gender. Adoption of gender roles determined traditionally reflects the measure of dependency of women on men. Thus, social position of many women is specified by men because of their dependency. The difference observed in the entrepreneurship of two genders may be linked with the raising of girls in a manner that is more oppressive, obeying and necessitating to be content with what you have [2]. However, number of areas where women may carry on entrepreneurial activities is increasing. Especially demand in food and beverage sector and sales of home-made goods has increased. There are entrepreneurship areas in these and similar sectors where women may improve their personal traits [20]. Rapidly changing social structures, girls taking their place in the community life as boys and girls starting to benefit equally from education, and individuals in the sample group being in the same education medium have hindered occurrence of a difference in terms of gender [40].

Crant has established that entrepreneurship tendency has a relation with gender as a consequence of a study he realized on 181 university students.

Yılmaz and Sünbül have not found a significant difference in the entrepreneurship levels of female and male students (according to gender) as a result of statistical analyses of data obtained from the study they performed on 474 students receiving education in different departments of Selçuk University.

Bilge and Bal state that they did not observed significant differences between the entrepreneurship tendencies and gender in their study realized in students of Celal Bayar University.

However, entrepreneurship averages of male students were higher than values of female students.

Genders of individuals affect their entrepreneurship tendencies [35]. This effect may be considered in various dimensions. For example, gender difference causes differences in terms of personal characteristics and changes personal perception and influences entrepreneurship tendency cognitively [13]. From a different viewpoint, gender difference has an important effect in terms of taking up the challenge of entrepreneurship and compliance with the social environment, besides causing perceptual change in the individuals. From this viewpoint, male individuals exhibit more positive nature [12].

Avşar has determined in his study that students of F.E.A.S. have a higher average for their entrepreneurship characteristics in comparison to the students of faculties of medicine and engineering. Also he stated that entrepreneurship training received by F.E.A.S. students has increased their level of entrepreneurship, and the reason of low entrepreneurship levels of other groups may be the fact that these students did not receive this training. In our study, it is determined that entrepreneurship levels of participants showed difference according to the variable of faculty and in favor of school of physical education and sports ( $F=9.472$ ,  $p<.05$ ). It is seen that point average of students of school of physical education and sports received from entrepreneurship scale is higher than the other faculties. When it is considered that students receiving education in School of physical education and sports do not participate in entrepreneurship training, family income of 56.1% is 1000 TL, 32.5% is 20 years old and under; it may be stated that their intellectual courage capital is more. On the other hand, it may also be expressed that troubles graduates of school of physical education and sports experienced in the area of employment and opportunities to find more work area in the private sector have affected this situation.

Significant difference is determined between the entrepreneurship levels of participants and the variable of "department" in favor of departments of School of Physical Education and Sports ( $F=9.277$ ,  $p<.05$ ). It is seen that point average students of school of physical education and sports received from entrepreneurship scale is higher than the other faculties (Table 7). Even though students receiving education in the departments of faculty of education (preschool, primary school, social sciences, sciences, etc.) mostly prefer to be a civil servant, it is seen that 132.79 point average they received from entrepreneurship scale is within the interval of "high entrepreneurship" (Table 2). It can be stated that this result arises from limited employment opportunities in these areas and opinions of students to determine alternative work areas in order to guarantee their future. It is specified that students of 1st and 2nd classes constitute most of the students of F.E.A.S. in the research. 136.69

point average students received from entrepreneurship scale is found to be within the interval of “high entrepreneurship”. According to this result, it may be said that students have entrepreneurial thinking even though they did not receive any entrepreneurship training. In our study students of school of physical education and sports have the highest value of entrepreneurship tendency (141.71). The relation among the departments of S.P.E.S. is not examined in our study. New studies to be performed on this subject shall help to enlighten the subject more. In this study, an interesting conclusion is established that entrepreneurship tendency is high and in positive direction in the schools of physical education and sports.

A meaningful difference is determined between the entrepreneurship levels of participants and variable of “class” in favor of 3rd classes ( $F=6,145$ ,  $p<.05$ ). It is seen that point average students of 3rd class received from entrepreneurship scale is higher than the other faculties (Table 8). Students receiving education in school of physical education and sports constitute the great majority of students in 3rd class (92.9%). 42.8% of these students have an income less than 1000 TL. When positive relation between income and entrepreneurship tendency is taken into consideration, high entrepreneurship tendency of these students without any entrepreneurship training can be interpreted as these students have high intellectual courage capital.

A meaningful difference is determined between the entrepreneurship levels of participants and variable of “Family income status” in favor of those having family income between 1001 and 1500 TL ( $F=2,590$ ,  $p<.05$ ). It is seen that students having  $\leq 500$  TL income have the lowest average in comparison to the other income groups (Table 9). Arslan [17] has found that there is a positive relation between the entrepreneurship tendency and family income level and low children number in the family. In the study of Naktiyok and Timuroğlu (2009), it is determined that there is a decrease in the entrepreneurial intention in line with the decrease in income. When family has a high income level, family has the opportunity to give financial support to the individual when he/she shall initiate a business; thus it is expected that individual raised up in a family with high income level shall have a higher entrepreneurship tendency. In our study, it is observed that as the income level increases tendency of entrepreneurship is higher. However participants with a family income level of 1001-1500 TL has the highest entrepreneurship tendency.

In their study named “Effect of Family Factors on the Entrepreneurship Tendencies of University Students”, Örüçü *et al.* (2007) have determined that entrepreneurship tendencies of individuals are affected by family income, and differences are observed in the tendency of senior class university students to be an entrepreneur, and that children whose family income is high are in tendency to be an entrepreneur in comparison to the other income groups.

Entrepreneurship perception of individuals does not originate only from the personality structure. Socio-economic status of individuals in the society changes the perception of entrepreneurship [13]. Increase in the family income and subsequent economic welfare change the risk perception and increase the tendency of entrepreneurship, because entrepreneurs can decide on new initiatives without worrying, since they will be able to find capital easily for individualistic initiative. From this viewpoint, risk perception level of entrepreneurs is dependent on the size of the investment [14]. In their study named “an application on the effect of family factors on the entrepreneurship tendencies of university students”; Örüçü *et al.*, (2007) have determined that students with high family income are more willing to be an entrepreneur.

A meaningful relation is determined between the entrepreneurship level of participants and the variable “Sporting history” ( $F=7,613$ ,  $p<.05$ ). ). It is seen that this difference is between groups that have a sporting history at a certain period of time and the group that did not do sports. Point average of the group that did not do sports is the lowest average (Table 10).

Besides being a set of certain physical activities, sports is the concept that gives the feeling of personal and social identity and group membership, thus contributes to socialization of the individual (Küçük & Koç, 2003). In the research on relation between personality and sportive activities, when young performance sporters are compared with the non-sporters, O. Neumann has determined that those doing sports are more active, ready to establish relationships, enduring, accommodating well under difficult conditions. Also it is specified that those doing sports are more extroverted and more balanced emotionally [3, 37]. As a consequence, whether it is amateurish or aimed at maximal performance, sportive activities constitute a medium that contributes the development of personality by controlling the individuals in various ways, improving and completing the imperfections, and by establishing environment to exert the surpluses [14].

In Table 10, it is seen that those not doing any sports have received the lowest average from the scale. Role of sports in socialization of the individual is important. There are some criteria enabling us to be informed about the socialization level of individuals within the sports and socialization relationship.

As a result, it is seen that certain criteria are fairly important such as self-confidence, entrepreneurship, individual expressing himself/ herself, development of sense of social responsibility, social harmony, showing respect to others, being participative, being fond of others, unearthing talents, development of free thought, acting impartial, admitting success and failure and improvement of sense of belonging [34].

Kelinske *et al.* have investigated various benefits university students perceive by participation to sports activities, and determined socialization, competition, health, keeping fit and leadership features among these



benefits. Additionally, they established that male students gained more leadership characteristics by means of sportive activities [19]. In their study on students of Pamukkale University, Yaman *et al.* have specified positive effects of sports on personality development. Results of the study established that personality characteristics of university students participating in sports activities, such as 'being practical', 'being venturous', improved positively [39].

It can be said that developmental effects of sports on the personality characteristics –such as leadership, sense of entrepreneurship, harmony with society, accommodating oneself to difficult conditions- and socialization of individuals enable entrepreneurial characteristics of individuals to be more distinct. A meaningful difference is determined between entrepreneurship level of participants and the variable of "registered sporting" in favor of registered sporters ( $t=4,856$ ,  $p<.05$ ). It can be said that registered sporters have a higher entrepreneurship level. This situation may be interpreted in this way; since students doing registered sporting are in a process of socialization because of exercises, participation to sports organizations, this socialization causes characteristics of responsibility, harmony, leadership and entrepreneurship to come to the forefront. However, no significant difference is determined between the entrepreneurship levels of participants and variable of "Registered sporting". It can be stated that time of doing registered sporting is not determinant on the entrepreneurship characteristics of individuals doing sports.

A meaningful difference is determined between entrepreneurship level of participants and the variable of "daily mood" ( $KWH=30,975$ ,  $p<.05$ ). It is observed that this difference is between quiet-calm group and social-extroverse, hyperactive groups; and hyperactive group and hot-blooded group (Table 12). In a research performed by Tiryaki (1991), it is specified that those doing sports are more extroverse and more balanced emotionally in comparison to those not doing sports [3, 37]. It is observed that individuals with a daily mood defined as social-extroverse and active have higher entrepreneurial characteristics. This situation can be considered as the reflection of positive effects of sports on personality characteristics and socialization.

#### Conclusion:

Factor of entrepreneurship is important in the development of countries. For this reason, universities bear responsibility in education, encouragement and training of university students as the entrepreneurs of future. Entrepreneurship training is not given as a course or very limited training is given except specific faculties and departments. In a great number of studies, results are obtained that receiving entrepreneurship training increases the tendency in this direction. It can be said that extensive entrepreneurship training to be given in universities shall play an important role in the improvement of entrepreneurial tendencies of students. Providing this training in universities besides specific faculties and departments shall crack the door open for a great number of students. One of these schools is the School of Physical Education and Sports. Sports industry offers a good deal of opportunities for entrepreneurs with its growing structure in the private sector. Number of sports-focused establishments is increasing day by day. Entrepreneurship training to be given to the students receiving education in School of Physical Education and Sports shall enable utilization of opportunities in the private sector by the students. Even though the number of studies performed on entrepreneurial tendencies of university students is very low, most of these studies are realized in students of management. In this study, it is aimed to determine entrepreneurial profiles of students receiving education in different faculties/ departments, and to compare entrepreneurial profiles of students receiving education in S.P.E.S. and in other faculties included in the study in terms of certain demographical features. Additionally, the effects of total time of doing sports and registered sports status and times on the entrepreneurial profiles of the participants are examined.

At the end of the study, it is determined that entrepreneurial infrastructure of university students is at a sufficient level, and that entrepreneurship level does not differ according to the variables of gender and age. It is established that students having a monthly income of  $\leq 500$  TL have a lower entrepreneurial level in comparison to the other income groups, and that entrepreneurial level of students doing sports and whose daily mood is generally social-extroverse and energetic is high. Also, it is concluded that students of school of physical education and sports have the highest entrepreneurial level in accordance to the faculty and department variable. High entrepreneurial level of these students even though their income level is generally low, can be interpreted that they have a powerful intellectual courage capital. When we consider that intellectual courage capital sometimes may be more important than the financial capital, it can be said that students receiving education in this section have taken the first step towards to the entrepreneurship. Entrepreneurship training, that includes recreation, sports management and coaching sections under the structure of S.P.E.S. for which job and entrepreneurial opportunities are more in the private sector, may improve the entrepreneurial activities in these areas. Quality of the education system should be configured in this direction in the universities. Entrepreneurial potential of university students is highly important in terms of our country and society. Thus, it shall provide benefits if courses such as entrepreneurship, leadership, management, etc. are programmed as joint courses of all faculties, and seminars and lectures on entrepreneurship are given and promoting events are organized for the students.

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